

Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

No claim has been canceled, added, or amended.

Listing of Claims:

1. (Previously presented) A method of operating a discharge lamp in a first mode of operation having a first operating frequency, which is activated when a burning voltage of the lamp is at least as high as a first limit value, and a second mode of operation with a second operating frequency that is higher than the first operating frequency, which is activated when the burning voltage of the lamp is not more than the first limit value.
2. (Previously presented) The method of claim 1, wherein the first operating frequency lies between approximately 50 and 200 Hz.
3. (Previously presented) The method of claim 1, wherein the lamp current is superimposed with current pulses in the first mode of operation.
4. (Previously presented) The method of claim 1, wherein the second operating frequency is higher than the first operating frequency by a factor between approximately 2 and 20.
5. (Previously presented) The method of claim 1, wherein the second operating frequency has a value of between approximately 300 and 1500 Hz.
6. (Previously presented) The method of claim 1, wherein the first limit value lies at a voltage that is approximately 10 V higher than a minimum voltage of a lamp driver unit that can still drive the lamp with its rated power or a desired power.

7. (Previously presented) The method of claim 1, wherein the first limit value has a hysteresis.
8. (Previously presented) The method of claim 1, with a third mode of operation which is activated when the burning voltage of the lamp is not more than a second limit value that is lower than the first limit value, and in which third mode of operation a discharge path between electrodes of the lamp is lengthened by a change in at least one operating parameter of the lamp until the burning voltage is at least as high as the second limit value.
9. (Previously presented) The method of claim 8, wherein the at least one operating parameter includes a third operating frequency that is lower than the second operating frequency by a factor of between approximately 2 and 1000.
10. (Previously presented) The method of claim 8, wherein the at least one operating parameter includes a DC component that is applied to the lamp.
11. (Previously presented) The method of claim 8, wherein the second limit value lies at a level that is approximately 5 V higher than a minimum voltage of a lamp driver unit that can still drive the lamp with its rated power or a desired power.
12. (Previously presented) The method of claim 1, wherein the second operating frequency is synchronized with an image frequency of a display system.

13. (Previously presented) A circuit arrangement comprising:

a controller that is configured to operate a discharge lamp in a first mode of operation having a first operating frequency, which is activated when a burning voltage of the lamp is at least as high as a first limit value, and a second mode of operation with a second operating frequency that is higher than the first operating frequency, which is activated when the burning voltage of the lamp is not more than the first limit value,

a comparator for comparing the burning voltage with the first limit value, and

a generator for generating the first and second operating frequencies of the lamp current in dependence on an output signal of the comparator.

14. (Previously presented) A lighting unit that includes a high-pressure gas discharge lamp and a circuit arrangement as claimed in claim 13.

15. (Original) A projection system with a projection display and a lighting unit as claimed in claim 14.

16. (Previously presented) A computer program with program code stored on a computer-readable medium for implementing the method as claimed in claim 1 when the program runs on a programmable microcomputer or microcontroller.

17 (Canceled)

18. (Previously presented) The method of claim 9, wherein at least one of the second operating frequency and third operating frequency is synchronized with an image frequency of a display system.

19. (Previously presented) The method of claim 8, wherein the discharge path is lengthened by the change in the at least one operating parameter until the burning voltage is at least as high as the first limit value.

20. (Previously presented) A system comprising:

a voltage source that is configured to provide a variable output to an arc discharge lamp, including a generator that is configured to provide a variable frequency drive signal to the output to the lamp, and

a comparator that is configured to compare a voltage of the voltage source to a voltage limit to provide a comparison output,

wherein the generator is configured to selectively provide one of a first and a second frequency drive signal to the lamp based on the comparison output.

21. (Previously presented) The system of claim 20, including a projection display.

22. (Previously presented) The system of claim 20, including a second generator that is configured to selectively provide a current gradient based on the comparison output.